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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MERCHANT & GOULD PC				
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MINNEAPOLIS, MN 55402-0903				
EXAMINER				
KATAKAM, SUDHAKAR				
ART UNIT		PAPER NUMBER		
1621				
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03/30/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/583,902

Applicant(s)

BURGOS ET AL.

Examiner

SUDHAKAR KATAKAM

Art Unit

1621

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12, 13 and 15-26 is/are pending in the application.
- 4a) Of the above claim(s) 22-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12, 13, 15-21, 25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of the application

1. Receipt of Applicant's request for continued examination filed on 22 Feb 2010 is acknowledged.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 22 Feb 2010 has been entered.

2. With regard to previous 103(a) rejection for the claims, the applicants' arguments are not found persuasive. However, upon further consideration, a new ground(s) of rejection is made in view of different interpretation of the previously applied reference, new prior art found, and provide an explanation of the rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 12, 13, 15-21, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Johnson et al** (WO 99/18065), in view of **Zhang et al** (J Org Chem, 1999, 64 (6), pages 1774-1775; see IDS 6/21/2006).

Johnson et al teach a process for large scale preparation of enantiomerically enriched chiral amines, such as enamide derivatives of the formula 4, prepared by reduction of oximes [see formula 2 in page 14], with a reducing metal M in the presence of an acylating agent [see claim 1 in page 14]. The catalyst used is a complex of a transition metal M^{2+} and a chiral phosphine ligand [see claim 2 and examples]. The reaction temperature is maintained at 75°C, and the product resulted in a moderate to good yields (40-85%, unoptimized) and in a high state of purity [page 5, lines 15-23]. **Johnson et al** also exemplifies the synthesis of N-(3,4-dihydronaphthalen-1-yl)-acetamide using Fe as the catalyst [page 10, example 5, lines 20-27]. Included is a washing step containing sodium hydroxide [page 10, lines 24-25] and the acyl derivative (acetic anhydride and acetic acid) is used as the solvent [page 10, lines 20].

The differences between the instant claims and the **Johnson et al** are as follows:

- (i) **Johnson et al** fail to teach applicant's particular hydrogenation catalyst metal;
- (ii) **Johnson et al** fail to teach particular form of catalyst;

(iii) **Johnson et al** fail to teach hydrogen pressure and with the particular mineral salt.

With regard to (i) of above, **Zhang et al** teach, in an analogous process, Rh catalyzed asymmetric hydrogenation of an enamide [see Table 1 in page 1775].

With regard to (ii) and (iii) of above, a skilled person in the art would prefer to choose suitable form of catalyst and pressure for the reaction process through a routine experimentation, at the time of the invention, and determine the optimization of these limitations to provide the best effective variable depending on the results desired. Thus it would be obvious for a given process to optimize particular form of a catalyst, the use of hydrogen pressure and the particular mineral salt. The Applicant does not show any unusual and/or unexpected results for the limitations stated. Note that the prior art provides the same effect desired by Applicant, the production of enamide derivatives from oximes.

Therefore, it would be prima facie obvious to one of ordinary skill in the art at the time of the invention, to combine the above cited prior art and to reach the instant applicants' process with a reasonable expectation of success. Absent any showing of unusual and/or unexpected results over applicant's particular catalyst metals, the art obtains the same effect on the production and purification of the enamide derivatives. The expected result would be an efficient production of enamide derivatives for the chemical and pharmaceutical industries.

Response to Arguments

6. Applicant's arguments filed on 22 Feb 2010 have been fully considered but they are not persuasive.

Applicants' arguments are moot in view of above new grounds of rejection.

Conclusion

7. No claim is allowed.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhakar Katakam whose telephone number is 571-272-9929. The examiner can normally be reached on M-F 8:30 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Sullivan can be reached on 571-272-0779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sudhakar Katakam/
Examiner, Art Unit 1621

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